physico-chemical in nature, of the membrane which incloses the gustatory papillæ.

3. *The "Call of God."*—Benezech reports the case of a scientific investigator who had a distinct auditory hallucination in which he clearly heard the voice of God calling to him to go out and labor in the missionary field. He gave up his scientific work and obeyed the call. The case is reported as a sort of sequel to Binet-Sangle's study of the prophet Samuel, who was looked upon as a cerebral degenerate.

METTLER (Chicago).

Miscellany

CASES SIMULATING CEREBELLAR DISEASE. A. A. Eshner (Journal A. M. A., March 23, 1907).

The author reports two cases suggestive of cerebellar disease. In one there was a reeling gait, unilateral weakness, impaired hearing and tinnitus, but the lack of objective symptoms and the fact that the disorders followed rather closely a mental shock, suggested hysteria, and treatment directed on this theory effected a speedy cure. The other case commenced with headache, vomiting, vertigo and ataxia, followed later by left hemiparesis and increase of reflexes, drowsiness, etc. There were no mental symptoms or ophthalmic or other cranial nerve symptoms, and the course of the disorder was afebrile. There was no specific history, but the patient gradually improved under treatment with iodids and mercury. The drowsiness, which seemed hardly to be accounted for by the bromids given for the intense headache, suggested meningeal or arterial disease.

THE PHYSIOLOGIC CONCEPTION OF DISEASE IN NEUROLOGY. L. Harrison Mettler (Journal A. M. A., February 23, 1907).

The author considers that the anatomic or organic conception of disease, the accounting for disorders by the structural changes found, though still dominant in clinical medicine, is passing, and that the idea that disease is an abnormal physiologic process is coming more to the front. In practical scientific medicine it is the abnormal physiology, the disturbed functions, that is the desired goal of study. This is the physiologic conception of disease, and while not opposed to the anatomic, on which it in part rests, it is a higher and more accurate conception than the latter. It has, nevertheless, been slow in acceptance, and while recognized by the most advanced leaders of medical thought, it is still inadequately presented in the teaching of the day. It is in neurology, he thinks, that the physiologic principle is the interpretation of disease, and its symptomatology is more conspicuous than in any other department of medicine. The neurone theory, which Mettler considers as essentially valid in spite of the modifications necessitated by recent discoveries, has given us one unit and that a physiologic one. In the nervous system it has given us a physiologic conception of its diseases, which renders the usual anatomic classifications of the textbooks confusing to the average student and practitioner. He gives a summarized explanation of his own tentative physiologic classification of nervous diseases, into those of the neuronic or functionating tissues and those of the supporting or nutritional ones, the former being characterized by degenerative, the latter by inflammatory processes, and these again being subdivided. This classification was published several months before the appearance of Grasset's more radical and elaborate presentation of a physiologic classification, but Mettler thinks that perhaps at the present time, when the pathology and neurologic status of some diseases are still in dispute, a less radical change from the older classifications may have its advantages.

MULTIPLE NEURITIS SIMULATING PROGRESSIVE MUSCULAR ATROPHY. J. Grinker (Journal A. M. A., March 9, 1907).

Three cases, one of alcoholic polyneuritis, one of lead paralysis and one of progressive muscular atrophy, illustrating the futility of attempting to differentiate these conditions by objective symptoms alone, without study of the etiology and course of the disease are reported by the writer, who holds, nevertheless, to the advisability of clinically separating the cornual from the peripheral lower neurone disorders. His conclusions are given as follows: 1. Clinically, multiple neuritis may simulate a spinal atrophy as regards distribution of parlysis, absence of sensory symptoms and protracted course. 2. Progressive spinal muscular atrophy may resemble neuritis in the presence of pain, remission of symptoms and subacute course. 3. Etiology and course are still the best guides in the clinical diagnosis of the various muscle atrophies.

SURGERY OF THE SPINAL CORD. J. B. Murphy (Journal A. M. A., Mar. 2, 1907).

The surgical diseases and lesions of the spinal cord, contusions, concussions, punctured wounds, hemorrhage, fractures and dislocations, gunshot wounds, spina bifida, syringomyelia, etc., and their management, are reviewed by the author. He holds that when the axons and ganglion cells that make up the substance of the cord above the cauda are destroyed, regeneration is impossible, and, therefore, in gunshot or stab wounds with immediate paralysis, operation is useless as regards hope of repair, except in the caudal zone, where the possibilities are the same as in the case of wounds of peripheral nerves. Hemorrhage, concussion and contusion without laceration may give rise to the same immediate symptoms as division, and a positive differential diagnosis is impracticable. The time and order of appearance of symptoms may be the only guides; there is no direct relation between the severity of the trauma and the degree of injury to the cord. Absence of immediate paralytic symptoms is not a guide—they may appear after days or weeks. Early spinal puncture may relieve paralysis due to hemorrhage which in some cases may be as complete as that due to division of the cord. Most patients with incomplete paralysis following fractures recover without operation, and when the displacement is not great the physician is justified in assuming that the cord is not suffering continuous compression and in refraining from operation. The special indications as regards operation in the various conditions above enumerated are pointed out and the technic of laminectomy is described. The danger of delay in conditions calling for operation, especially in non-malignant tumor, tuberculoma, etc., is emphasized. Late operations after necrosis in the cord has taken place are worthless. Surgery of the spinal cord, like surgery elsewhere, must be timely, *i.e.*, before the pathologic condition has passed the possibility of repair.